

Suggestions on Delta Plan draft 4

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June 19, 2011

Suggestions for the Delta Plan writers

My main suggestion is to base Chapter 7 on a compelling description of the flood risk it addresses. Additional suggestions deal with clarity and precision of wording, effectiveness of sidebars and illustrations, and references cited.

FLOOD RISK

Chapter 7 needs to paint the picture of flood risk in the Sacramento – San Joaquin Delta and in the Suisun Marsh. It would improve on the existing effort on page 134, lines 3-10, largely by providing maps like these:

- Historical levee failures (compare with the current treatment on p. 137, line. 28)
- Assets now behind levees (cf. p. 140, line. 15)
- Sources of earthquakes said to threaten the levees (p. 15, line. 4; p. 137, line. 30)
- Project and non-project levees (cf. 140, line. 21-27)

It would also provide supporting references, more nearly as in Chapter 6 (p. 121-129) than in existing Chapter 7 (p. 150-151).

WORDING

The draft plan retains its expansion of “Delta” to include, in some uses, the marshes north of Suisun Bay (p. 19, lines 4-5). This taking of geographic liberties continues to sow confusion (by page, line):

85, 14-19 – This Delta of historical ecology appears to exclude Suisun Bay

93, 28 and 31 – Is the “Delta” on line 28 the same as the restricted “Delta” on line 31?

133, 5 – Suisun Bay is below the confluence

137, 25 – What is the “Delta” of the 1992 Delta Protection Act

155, 4-5 – Which “California Delta” is to be protected as a place?

155, 16 – Did agriculture predominate in the Suisun Marsh?

158, 41 – Do the “Primary Zone” and “Secondary Zone” include the Suisun Marsh?

As it does on page 16, line 5, the draft plan could use the plain English “earthquakes” instead of jargon like “seismicity” and “seismic threat” (5, 18; 14, 14; 134, 11, 143, 16).

Consider replacing “tidal marsh” with “tidal wetlands (marshes and swamps)” on page 10, line 33. Or footnote “tidal wetlands” to say that in the Sacramento – San Joaquin Delta (in its proper geographic sense), some of these wetlands were dominated by tules and other herbaceous plants (marshes), while others were dominated by woody plants (swamps). Herbert Mason’s classic “A flora of California marshes” draws this distinction.

Additional suggestions for clarity or precision:

- 4, 21 – Make consistent with “past 160 years” (84, 32; 89, 38)
- 4, 22 – Avoid the ill-defined “we”, here and with “our” (25, 33; 33, 40)
- 5, 31 – “first big step” --> “a key step”
- 5, 35-36 – “critical component protecting human lives subject to the constant threat of flooding from numerous factors” --> “low-cost complement to engineering against the failure and overtopping of levees”
- 10, 36 – Replace “seasonally flooded” with “mostly flooded at high tide”, after checking with Alison Whipple or Robin Grossinger.
- 10, 36 – Cite Figure 5.1 to support the estimated loss of tidal wetland. Similarly cite, on page 11, lines 1-37, key figures in Chapter 4.
- 15, 4 – “affecting” how?
- 15, 4 – Describe (in Chapter 7) the expected consequences, in the Delta, of a 6.7-magnitude earthquake on the San Andreas fault or Hayward fault. Without such a description, the reader can’t judge the level of threat implied by this entry in the table
- 15, 4 – “range of 200% increase” --> “roughly two-fold increase”. Ditto for the 450%
- 26, 14 – “Evaluate and Respond” --> “Evaluate and respond” to help the reader see three groups, not four. Along these lines, consider limiting uppercase to the first word and proper nouns in chapter and section headings, and in words on illustrations (the nine steps in Figure 2-1, for instance). The heading fonts suffice to call attention. Headings with few caps are easier to read than Headings with Many Capitalized Words.
- 36, 23-24 – As a courtesy to the busy reader, cite page where she or he can find this policy.
- 55, 10 and 17 – The “roughly constant” vaguely contradicts the “variability”
- 85, 17-19 – Scrap the three landscape names aside from the north, central, and south locators. Distributary channels, though included in the southern name only, run farther in the north than in the south.
- 87 – In the figure, make clear that these are average flows. Ornament the columns with bars that give standard deviation and extreme ranges (to support the variability stated on page 55, line 17).
- 89, 38 – How much?
- 92, 5 – No Alaskan wetlands cover more area? Provide a supporting reference.
- 133, 7 – “fluctuating sea levels” --> “rising postglacial sea levels”. The marshes and swamps kept their heads above water as the sea rose relative to the surrounding uplands.
- 134, 15-20 – Paragraph needs a topic sentence
- 137, 28 – Quantify “poor”
- 137, 30 – “near” --> “in or near” (to cover the Midland fault, which should appear on a map)

147, 26 – “reduced its volume by approximately 50 percent” – Not just a case of shrinkage from drying, but also of decomposition in a soil profile that lowers itself into wet peat

155, 27 – Must ageing weaken a levee?

ILLUSTRATIONS AND SIDEBARS

Use data points or vertical bars to show data in Figure 4-5. Avoid using lines that falsely imply smooth changes between those data points.

Use captions to tell the main point of the figure and, if the figure is in a sidebar, to state the main point of the sidebar. Such captions serve the busy reader while also helping to draw him or her into the text.

Each map needs a scale and a north arrow.

Enliven more of the sidebars with illustrations.

Include illustrations that show human faces.

REFERENCES

In addition to making Chapter 7 more scholarly:

15, 4 – Cite the 2011 Stahle paper in place of the websites in d

22, 39-40 – Necessary to cite a controversial presentation, in addition to the well-reviewed working-group report?

100, 17-19; 101, 34-40 – If perchance the San Francisco Estuary Institute posts, online, preliminary versions of its maps of the Delta’s historical ecology, it would be great to cite them.

134, 15 – Check with Anne Linn of the National Research Council on the status of the NRC’s review of sea-level changes in California. The report may now be in review, or close to it, and it may come out about when the Delta Plan does. The State of California provided much of the funding. How does 55 inches compare with the estimates in the NRC report?